

wherein (σ_T) is stress in said i-th insulating film and is positive when tensile stress and negative when compressive stress.

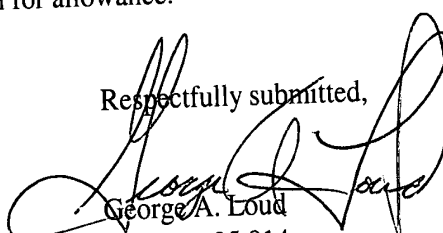
47. (Amended) A method according to claim 43, wherein said forming of said first insulating layer is by plasma CVD, and said forming of said second insulating film is by heating for reaction of a gaseous mixture including at least an organic silane and oxygen.

REMARKS

A petition for a two month extension of time has today been filed as a separate paper and a copy is attached hereto.

Claim 43 has been amended to include the limitations of cancelled claims 44, 45 and 46. Accordingly, claim 43 represents allowable claim 46 rewritten in independent form. The only other pending claim is claim 47 which has been amended to depend from claim 43. Accordingly, the application is believed to be in condition for allowance.

Respectfully submitted,


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43. (Twice Amended) A stress-adjusted insulating film forming method for forming a multilayered insulating film on a substrate, said method comprising:

- (a) forming a first insulating layer with compressive [a first type of] stress;
- (b) forming an aluminum interconnection layer on and in contact with said first insulating layer;
- (c) forming a second insulating layer with compressive [said first type of] stress on and in contact with said interconnection layer;

wherein said interconnection layer is sandwiched between and in contact with said first insulating layer and said second insulating layer and wherein the total stress in said insulating layers is limited to less than 2×10^5 dyne/cm so as to suppress bending of said interconnection layer; and

(d) before forming said first insulating layer or after forming said second insulating layer, forming a third insulating layer with tensile stress, so as to adjust overall stress of said stress-adjusted insulating film;

wherein the stress-adjusted insulating film has first through i-th insulating layers having the thickness t_1 through t_i , respectively, and wherein the thickness (t_i) of i-th insulating layer of said stress-adjusted film is determined so as not to exceed stress (σ_T) of said overall stress-adjusted insulating film where said stress (σ_T) is calculated as:

$$\sigma_T = \sum_{i=1}^n (t_i \times \sigma_i)$$

wherein (σ_T) is stress in said i-th insulating film and is positive when tensile stress and negative

· when compressive stress.

47. (Amended) A method according to claim 43 [44], wherein said forming of said first insulating layer is by plasma CVD, and said forming of said second insulating film is by heating for reaction of a gaseous mixture including at least an organic silane and oxygen.